**Climate Discussion:** From DA 12-646, Paragraph 99. … *We believe that the USDA's hardiness index is a useful proxy for this information, and we use it to create a simple index called Climate that is based on the average annual minimum temperature.*[74] *The lower the minimum temperature, the more days the ground is likely to be frozen. The higher the index, the fewer frost-free days the study area would have. Based on the comments in the record, we expected this variable to be negatively correlated with capex (the higher the index, the more frost-free days the area should have, so construction costs should be lower).*
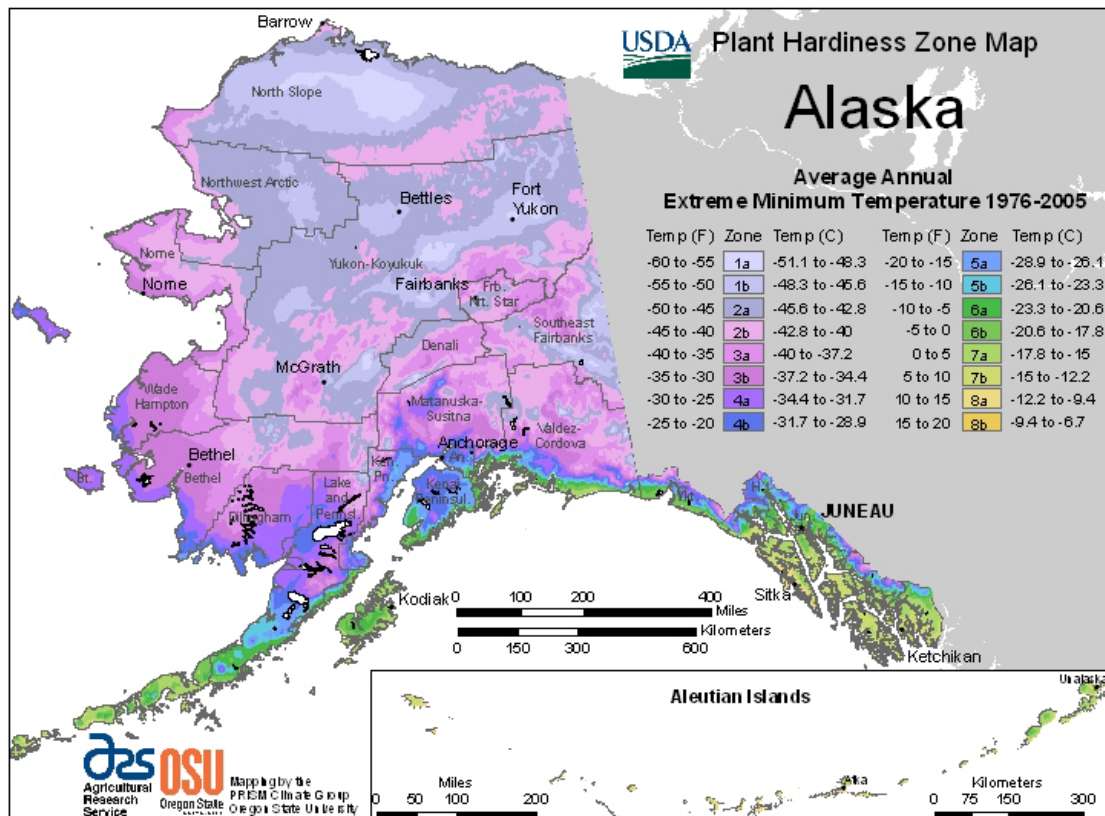

In reality, the serving areas with the lowest temperatures are being assigned a low input variable; areas with the highest minimum temperatures are getting the benefit of a high input variable. When these are multiplied times the positive coefficient, allowable costs are higher for warmer climates.

From the map above, you can see that ASTAC, which serves the North Slope of Alaska, was assigned an averaged minimum temperature slightly warmer than zone 1b (our input variable is 1.669573833).

In the map below, San Juan, Puerto Rico was assigned an input value of 13 (they are in the 13a. zone.)
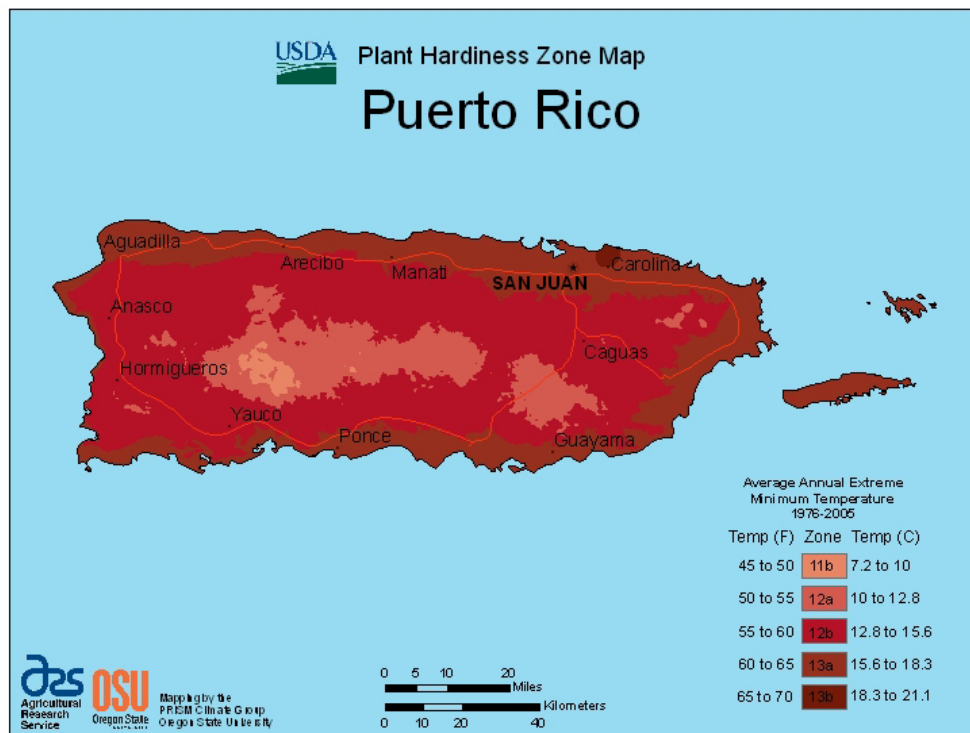
Here is the effect of the calculation which is a contradiction to the intent of the statement in paragraph 99, e.g. "*the higher the index, the more frost-free days the area should have, so construction costs should be lower*". San Juan receives a higher product with higher temperatures.

<mark>ASTAC</mark>

Input Variable		Capex Coefficient		Product of Input times coefficient
1.669573833	times	0.088635029	equals	**0.147982725**

Input Variable		Opex Coefficient		Product of Input times coefficient
1.669573833	times	0.135123717	equals	**0.225599022**

<mark>San Juan, Puerto Rico</mark>

Input Variable		Capex Coefficient		Product of Input times coefficient
13	times	0.088635029	equals	**1.152255377**

Input Variable		Opex Coefficient		Product of Input times coefficient
13	times	0.135123717	equals	**1.756608321**